

PTOL-413A (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Applicant Initiated Interview Request Form

Application No.: 09/864,309 First Named Applicant: Shigeyuki Uzawa

Examiner: Ryan A. Jarret Art Unit: 2125 Status of Application Amendment filed

Tentative Participants:
 (1) Jack S. Cubert (2) _____
 (3) _____ (4) _____

Proposed Date of Interview: 8/25/05 Proposed Time: 2 PM

Type of Interview Requested:
 (1) ☐ Telephonic (2) ☒ Personal (3) ☐ Video Conference

Exhibit To Be Shown or Demonstrated: ☐ YES ☒ NO
 If yes, provide brief description: _____

Issues To Be Discussed

Issues (Rej., Obj., etc)	Claims/ Fig. #s	Prior Art	Discussed	Agreed	Not Agreed
(1) <u>Rejection</u>	<u>Claim 48</u>	<u>Hasagawa et al.</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(2) _____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(3) _____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(4) _____	_____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

☐ Continuation Sheet AttachedBrief Description of Arguments to be Presented: See Attached Sheet

An interview was conducted on the above-identified application on _____.

NOTE:

This form should be completed by applicant and submitted to the examiner in advance of the interview (see MPEP § 713.01).

This application will not be delayed from issue because of applicant's failure to submit a written record of this interview. Therefore, applicant is advised to file a statement of the substance of this interview (37 CFR 1.133(b)) as soon as possible.

(Applicant/Applicant's Representative Signature)

(Examiner/SEE Signature)

This collection of information is required by 37 CFR 1.133. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 123 and 37 CFR 1.14. This collection is estimated to take 21 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Applicant Initiated Interview Request Form (Attachment)

Independent Claim 48 as currently amended is directed to exposure apparatus that exposes a wafer to a pattern. In the apparatus, the atmosphere of an exposure chamber is conditioned to differ from the atmosphere in another apparatus outside the exposure chamber. A wafer is exposed to the pattern in the exposure chamber which is purged by an inert gas. The wafer is transferred between the chamber and the other apparatus through a port section that has a load-lock mechanism including a vacuum mechanism which creates a vacuum below atmospheric pressure inside the port section and a supply mechanism which supplies the inert gas inside the port section.

Hasagawa, et al. discloses a processing system which includes first and second chambers. Each chamber accommodates a processing apparatus and each chamber is able to be kept gas tight. A coupling member couples the processing apparatuses accommodated in the first and second chambers with each other. An elastic gas tightness holding member gas tightly seals portions between the coupling member and the first and second chambers.

It is one feature of the present invention that the atmosphere in the chamber where the wafer is exposed to a pattern is purged with an inert gas. As disclosed at lines 5-24 of page 34 in the specification as filed with respect to Fig. 13, the exposure apparatus 39 has a purge environment in which heating and cooling units 41a and 41b are located. The purging is preferably performed while the wafer is heated. It is further disclosed at lines 11-37 of page 37 in the specification as filed that O₂ and H₂O in exposure apparatus housing 20 are purged by N₂ gas and that purge gas may be supplied only near the exposure light path.

The transfer operations of the Hasagawa, et al. reference are disclosed at lines 1-58 of column 6 with reference to Fig. 5. During the transfer operations, a sample is transferred between a conveyance module chamber 121 and a process chamber 101 through a load chamber 102a. As clearly shown in Fig. 5, the process chamber 101 is always maintained at a reduced pressure. There is no disclosure or suggestion of any purging (i.e., making free from impurities) of the process chamber 101 during the transfer into or out of the process chamber. Only the load chamber 102a is purged after the transfer of the sample into the process chamber. Further, the Hasagawa, et al. disclosure is devoid of any teaching or suggestion that an inert gas is used in either the process chamber 101 or the load chamber 102a. Only the use of a helium ambience in the chamber 301 is disclosed in Hasagawa, et al. with respect to Figs. 7 and 8. There is, however, no suggestion in Hasagawa, et al. of any purging of the chamber 301 with the helium ambience. Accordingly, it is not seen that Hasagawa, et al. in any manner teaches or suggests the purging of a process chamber with inert gas as in Claim 48.

It is a further feature of Claim 48 as currently amended that a wafer is transferred between the chamber and the other apparatus through a port section that has a load-lock mechanism in which a vacuum mechanism creates a vacuum below atmospheric pressure inside the port section and a supply mechanism that supplies inert gas inside the port section. Hasagawa, et al. may disclose, at lines 53-55 of column 5, "a gas supplying and discharging system that comprises a pump and a regulator, for example, a reduced pressure state and an atmospheric pressure state can be selectively produced in each of the process chamber 101 and the load chamber 102a, independently of each other." With respect to Figs. 7, 8 and 9 of Hasagawa, et al., there is only a disclosure of a helium ambience in a process chamber or in the process chamber 301 and a

second chamber 311. With respect to transfer of a sample between a load chamber and a process chamber in Fig. 5 of Hasagawa, et al., however, there is no suggestion of supplying an inert gas into the port section as in Claim 48.